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APPLICATION NUMBER: 60/590,151

FILING DATE: *July 22, 2004*

RELATED PCT APPLICATION NUMBER: PCT/US05/00954



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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

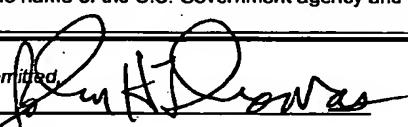
This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

Express Mail Label No. ER 324580271US

INVENTOR(S)					
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)			
Michael W.	Stephens	Glen Allen, Virginia			
Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (500 characters max)					
PRE-PACKAGED, COMBUSTIBLE PRODUCT					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number: 31704					
OR					
<input type="checkbox"/> Firm or Individual Name	John H. Thomas, P.C.				
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input type="checkbox"/> Specification Number of Pages _____	<input type="checkbox"/> CD(s), Number _____				
<input type="checkbox"/> Drawing(s) Number of Sheets _____	<input type="checkbox"/> Other (specify) _____				
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.			FILING FEE Amount (\$)		
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees.			80.00		
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<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

[Page 1 of 2]

Respectfully submitted

SIGNATURE 

TYPED or PRINTED NAME John H. Thomas

TELEPHONE 804 344 8130

Date July 22, 2004

REGISTRATION NO. 33460

(if appropriate)

Docket Number: STEPHENS2

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE U.S. PATENT AND TRADEMARK OFFICE
Provisional Application Cover Sheet

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P.O. Box 1450
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Sir:

This is a request for filing a PROVISIONAL APPLICATION under 37 CFR 1.53(c).

INVENTOR(s)/APPLICANT(s)

Last Name	First Name, MI	Residence (City and Either State or Foreign Country)
Stephens	Michael W.	Glen Allen, Virginia

TITLE OF THE INVENTION

PRE-PACKAGED, COMBUSTIBLE PRODUCT

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ENCLOSED APPLICATION PARTS (check all that apply)

Specification *Number of Pages* 5
 Drawing(s) *Number of Pages* 4
 Power of Attorney
 Additional inventors are being named on separately numbered sheets attached hereto.

METHOD OF PAYMENT

A check in the amount of \$80.00 to cover the filing fee is enclosed.

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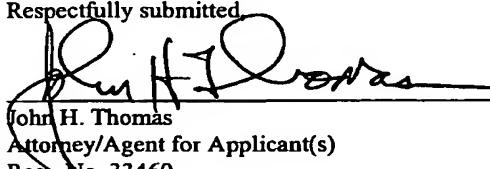
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Date of Deposit: 7/22/2004

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By John H. Thomas
Typed Name: John H. Thomas

Respectfully submitted,


John H. Thomas
Attorney/Agent for Applicant(s)
Reg. No. 33460

Date: 7/22/2004

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Content Variations

Michael W. Stephens
July 11, 2004

Background

Outdoor cooking is an immensely popular activity enjoyed by the vast majority of the adult population. A common method of cooking involves a charcoal briquette heat source and sometimes may include the addition of aromatic woods for flavor. The types of foods cooked vary considerably. To accommodate this variety of foods, cooks may be required to adjust any combination of the heat source temperature, cooking time and flavors.

Such cooking adjustments may require special knowledge about the foods being cooked and/or special capabilities of the cooking device. For instance, a gas grill may provide for adjustable flames and a charcoal grill may provide for an adjustable cooking grate.

Proposed Product

Method of varying contents of a pre-packaged, single use combustible product to create specific properties desirable for cooking varied foods, i.e., to create variations in flavor, heat, and/or cooking time tailored to different requirements for different foods.

1 - Heat Variations

Different combustible materials burn at different rates and temperatures. It is well known by those practiced in the art that lump coal burns hotter and faster than charcoal briquettes, which burn hotter than chunks of wood. This patent describes a method to provide combustible cooking fuel packages tailored to the requirements of the foods being cooked by varying the contents as follows:

a) High-Heat Embodiment

In this embodiment, the combination of material is a mix of approximately 30%-50% charcoal briquettes with the remainder of lump coal. The material may be randomly dispersed within the product. This product would be packaged and sold for the intended purpose of cooking beef and seafood steaks, hamburgers, vegetables and other foods that are typically seared and cooked over high heat and for a shorter period of time.

b) Low/Medium-Heat Embodiment

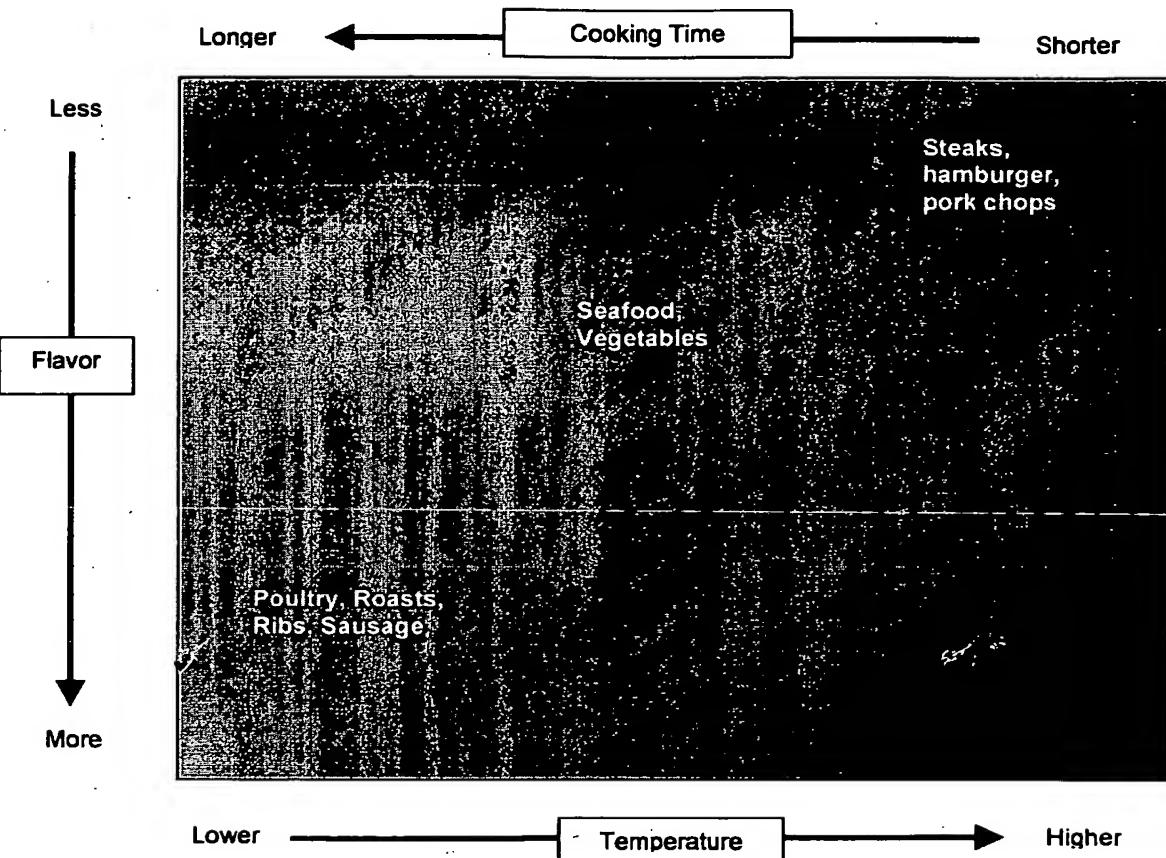
This embodiment would involve a combination of approximately 40%-60% charcoal briquettes with the remainder aromatic woods. The aromatic woods may be positioned at the top portion of the product, serving to minimize its combustion during the ignition phase and extending its burning phase during cooking. This product would be packaged and sold for the intended purpose of cooking chicken, sausage, ribs, and other foods that are typically cooked over lower heat for longer periods of time.

2 - Flavor Variations

Each of the above embodiments may include aromatic woods or other aromatic combustible materials (dried herbs, spices, vegetables, etc.) that are suitable and complementary to specific foods. The following chart provides examples.

Food	Lump Coal	Charcoal Briquettes	Aromatic Wood	Other
Steaks, hamburger, pork chops	50%-70%	30%-50%	None	none
Seafood	30%-50%	50%-60%	10%-20% Alder	Tarragon, Lemon
Poultry	None	50%-70%	30%-50% Hickory, Apple and/or Maple	Rosemary, Thyme
Roasts, ribs - beef, pork	None	50%-70%	30%-50% Hickory, Oak	Thyme
Vegetables	30%-50%	50%-60%	10%-20% Hickory	Rosemary, Thyme, Oregano

The following diagram illustrates the approximate relationship of the identified variables for the selected food items and categories.



Background

Outdoor cooking is an immensely popular activity enjoyed by the vast majority of the adult population. Central to this activity is the preparation and igniting of the heat source, commonly charcoal briquettes. Three phases of this process are 1) fuel preparation, 2) ignition phase and 3) burn phase.

Common steps in the preparation phase involve dispensing the desired amount of briquettes, typically offered by manufacturers in large containers (bags), then arranging them to promote burning, thereby reducing the time for the ignition phase. An alternate method to preparing the briquettes is to place the individual pieces into a cylindrical container designed for this purpose. Such a container is typically made of metal with a large opening at the top, a false bottom to create airspace underneath the briquettes and a series of holes at the bottom, small enough to prevent briquettes from falling out, but sufficiently large to allow air to pass through to create a chimney effect.

Proposed Product

Any combustible material for outdoor cooking that has been manufactured, assembled and/or packaged into a cylinder shape designed to facilitate air flow through the material and maintain structure until the material is sufficiently ignited (about 10 - 15 minutes). The dimensions are approximately 5-10 inches diameter base and 6-12 inches height.

The product contemplated in this patent intends to simplify and improve the preparation process in several ways:

- The product is pre-measured in common units and self-contained, requiring no dispensing.
- The product is pre-shaped and does not require manual arrangement, or the use of additional tools or devices, to facilitate heating.
- The product eliminates the problems associated with reusable tools, such as permanent storage and storage immediately after use (when the product is extremely hot and pose a safety risk and/or potentially damage wood or other combustible surfaces)
- The hollow shape of the product and bottom openings creates a natural flue, further enhancing the rate of heating compared to cylindrical or pyramidal shapes.
- The enhanced rate of heating lessens the need for accelerants which may pose safety, environmental or health risks and may adversely affect the flavor of the cooked food, as well as, add to the production and purchase cost. For instance:
 - In the manufactured or assembled embodiment, accelerant may be applied to the bottom ring only and allow the natural flue action to promote burning of the upper portions.
 - In the packaged embodiment, the packaging material could replace the need for an accelerant completely.

1 - Manufactured Embodiment

In this embodiment, the material is a charcoal blend, similar to the composition of ordinary consumer charcoal briquettes and equivalent to the amount of 2.5 pounds, or approximately 30 briquettes, manufactured into a cylindrical shape. Additionally, the bottom portion shall include an internal space so only the outer briquettes rest on the surface and gaps, or air ports, around the bottom circumference to facilitate air movement through the cylinder. In all cases, the manufacturing process will produce sections within the shape that are significantly less massive than the nominal wall, yet of sufficient mass to provide structural stability until the material composing the nominal wall is sufficiently ignited. The intended effect is for the less massive sections to burn through more quickly after igniting, leaving larger portions to burn more slowly, providing a sustained heat source for cooking.

- a) One manufacturing method would involve producing a solid cylinder of approximately 5-6 inches diameter. The cylinder will be formed with a series of grooves, indentations and/or through holes arranged such that their placement shall create sections significantly thinner between larger sections.
- b) Another manufacturing method would involve forming the material into the equivalent of layered circular discs and rings of charcoal briquettes. The briquettes may be of relative equal size and uniform shape, each interconnected to every adjacent briquette by a rib of sufficient size and thickness to allow air to pass between the briquettes and to provide structural stability until the briquettes are sufficiently heated. The bottom layer is a ring that forms an internal space so only the outer briquettes rest on the surface to facilitate air movement through the cylinder
- c) Another manufacturing method would involve the incorporation of alternate materials into the mold to take the place of connecting ribs. Such materials may be wooden rings or string.
- d) Yet another embodiment would involve fuel sources other than charcoal, such as wood composites.

2 - Assembled Embodiment

Same as 1 above except the fuel is produced as individual pieces and assembled into a cylindrical shape. In all cases, the assembly method will include material in addition to the fuel that shall be of a quantity and composition intended to burn more quickly than the fuel to minimize potential toxic fumes generated while cooking, but slow enough to maintain structural integrity of the cone shape until the fuel is sufficiently ignited. The additional material may be of specific composition selected to enhance the flavor of the cooked foods.

- a) One assembly method may include combustible adhesives that bind adjacent briquettes together to form a stable structure. The adhesive shall be of a composition designed to burn more quickly than the briquettes to minimize potential toxic fumes being generated while cooking, but slow enough to maintain structural integrity of the cone until the briquettes are ready for spreading.

Cylinder Version

Michael W. Stephens
July 11, 2004

- b) Another method may involve holes in the briquettes and rigid combustible materials, such as wood, that are threaded through each briquette to secure each in place to form a cylinder. A variation may involve noncombustible materials, such as metal wire.
- c) Another method may involve non-rigid material, such as string, fiber or twine, that are threaded through each briquette to secure each in place to form a cylinder.

3 - Packaged Embodiment

Same as 1 above except the fuel is manufactured as individual pieces and packaged into a cylindrical shape. In all cases, the packaging method will include combustible material in addition to the fuel that shall be of a composition intended to burn more quickly than the fuel to minimize potential toxic fumes being generated while cooking, but slow enough to maintain structural integrity of the cylinder shape until the fuel is sufficiently heated. The bottom portion of the packaging may be shaped such as to create an airspace below the bottom layer of briquettes and a series of air intake ports around the lower circumference and may also include additional material to serve as kindling. The packaging material may be of specific composition selected to enhance the flavor of the cooked foods. Additionally, the packaging may include printing and graphics for marketing and consumer purchasing and use information.

- a) Packaging method may include flexible material, such as paper and/or plastic, that is wrapped around loose briquettes, forming the desired conical shape.
- b) Another variation may include rigid material, such as cardboard and/or wood, that is formed to create two concentric cones, the outer one larger than the inner one, connected by a circular base and top, allowing sufficient space between the walls to store the briquettes.
- c) Another variation may include combinations of both flexible and rigid material, such as paper and cardboard.

Composition

Same as 1, 2 and 3 above except different materials are used as fuel. In all cases, the material shall be intended for outdoor cooking. Such materials may be pure charcoal, wood chunks, wood chips or any combination thereof. The material combinations may be in loose aggregate or composites with natural fillers used for bonding, even heating, etc.

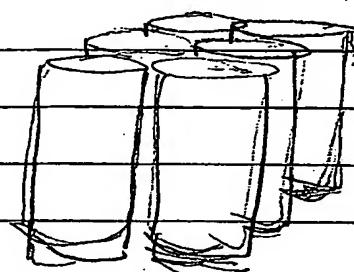
Shape

Same as 1, 2 and 3 above except the material is shaped in non-circular cylinder, such as a pyramidal, hexagonal, etc.

Size

The quantity of material per unit may be increased or decreased - e.g., from 2.5 pounds to lower or higher weight.

6/29/03



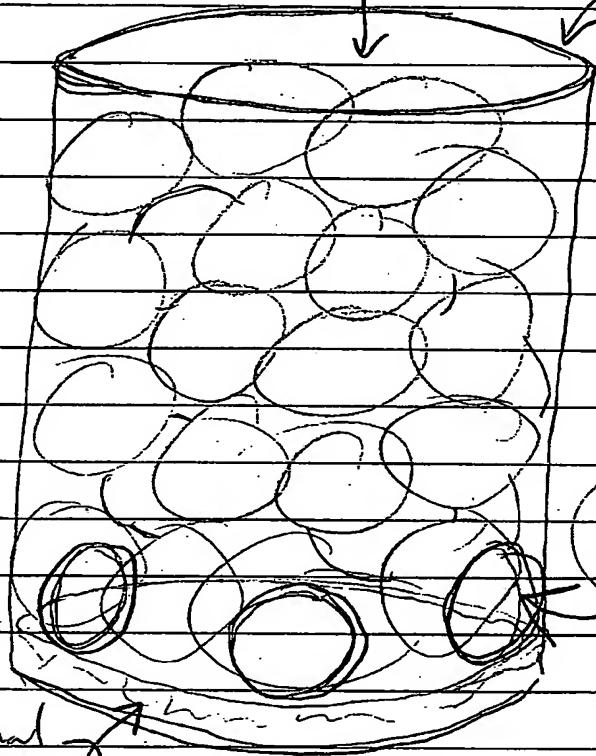
6 PACK

Char Chimney

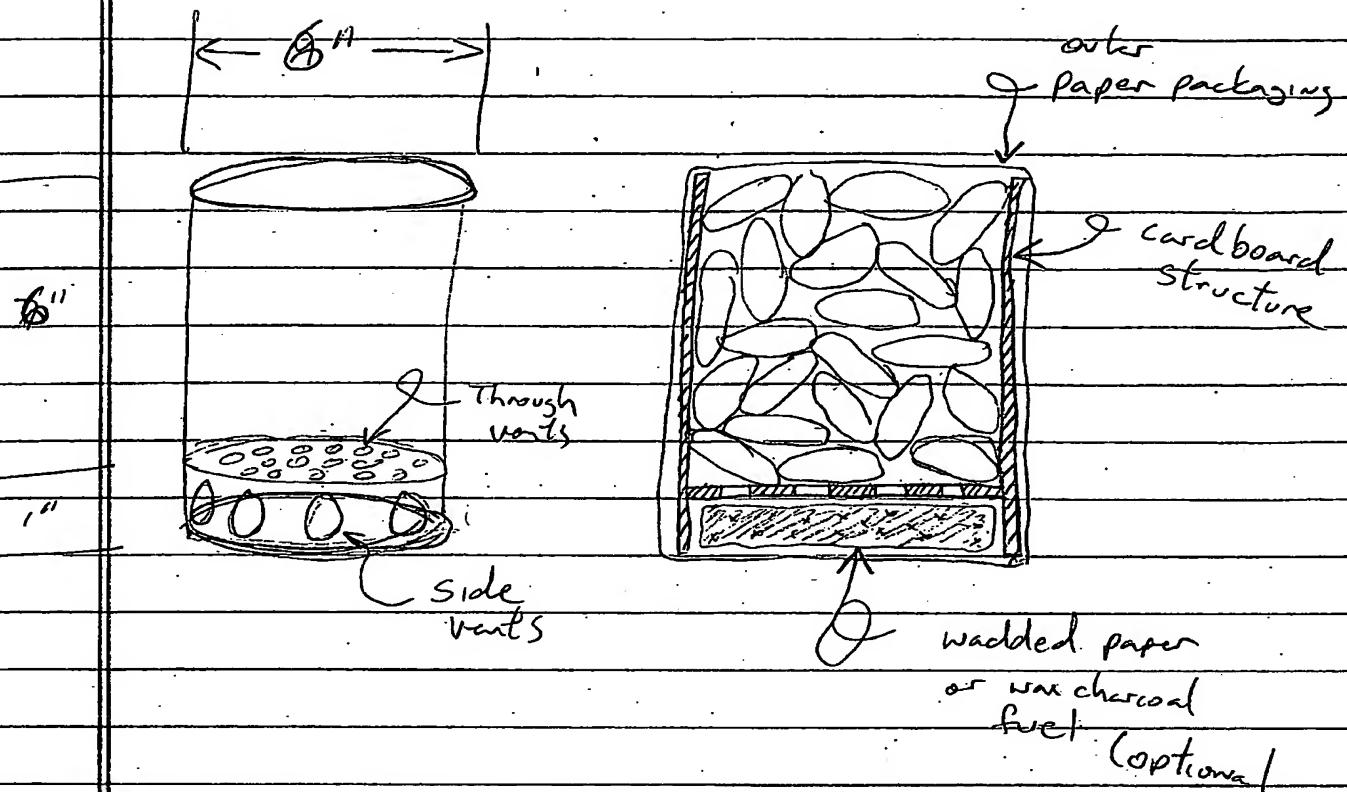
Starter material of
(charcoal & wax)

~ 2.5 lbs
charcoal

Card
board

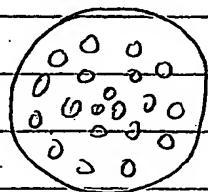


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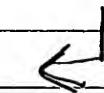
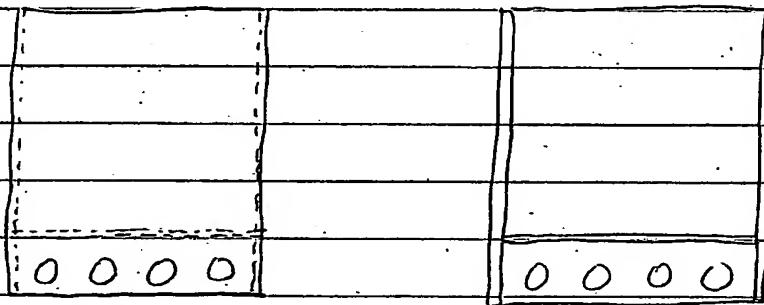


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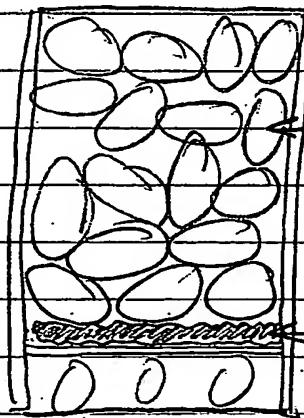


TOP



SIDE

CUT AWAY



charcoal
/other

fuel
(optional)

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